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ABSTRACT

In 1971, 67 persons at 32 libraries and 11 microform industries were interviewed to ascertain the acceptability of a permanent national microform agency, to determine the priority functions of such an agency and to specify its organization. It was recommended that the "Office of Micrographic Activities" be established under the administrative control of a research-oriented library association and that its priority functions be to: (1) support the development of library microform standards, (2) develop standards for microform equipment, (3) evaluate microform publications, (4) evaluate microform equipment, (5) provide information and education services, (6) serve as liaison between libraries and the microform industry, (7) serve as ombudsman for individual libraries on microform matters, and (8) encourage research and development. The report includes 15 references. (KB)

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FINAL REPORT

Contract No. OEC-0-8-080786-4612(506)

Determination of the Administrative and Functional Characteristics of a National Microform Agency

Edward A. Miller

Association of Research Libraries
Washington, D.C.

May 1972

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U.S. Department of
HEALTH, EUDCATICN, AND WELFARE

Office of Education
Bureau of Libraries and Educational Technology

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INTRODUCTION

This study is a continuation of a series of investigations that began in 1968 when the U. S. Office of Education made an initial grant to the Association of Research Libraries for the purpose of determining the current effectiveness and potential value of microforms in academic libraries. The early studies, directed and performed by Mr. Donald C. Holmes, clearly established the importance of microforms as carriers of information. Mr. Holmes' investigation also pointed out a number of appalling situations faced by libraries and their users with regard to procurement, storage and use of microforms.

The comprehensive report of the microform situation by Mr. Holmes (5) resulted in additional investigations sponsored by the ARL, with funds supplied by the Office of Education. A second interim report (6) contains Mr. Holmes' recommendations with regard to the necessary physical facilities for a microform reading area and the proper training of staff concerned with microform procurement and management. The same report includes a preliminary report by Dr. Felix Reichmann on the bibliographic control problem.

The present study concerns the recommendation by Mr. Holmes that there be established a permanent, national microform organization, or agency, which would provide a structure through which the varied problems involved in microform production, acquisition, organization, housing and use could be systematically studied, evaluated and solved. Holmes gave the agency first place in his list of nine recommendations developed from information collected during site visits to twenty-six institutions concerned with the production and use of microforms. (The concept of an agency to handle problems of this kind is not new. Herbert A. Kellar of the Library of Congress proposed the establishment of an impartial body or organization to follow documentary reproduction developments in 1941 (8). There is a marked similarity in the microform problems described by Kellar and Holmes. One can only conjecture whether the grim picture described by Holmes (5, pp.6-15) would be as serious had the Kellar recommendation been implemented.)

Examples of proposed functions to be performed by the agency included testing of microforms and the issuance of a "seal of approval" for products meeting specified standards. A subsequent report (6, p.63) expanded the list of recommended functions to include the following:

1. Establish and publish standards for microform publications, both in terms of technical and bibliographic quality.

2. Review all forthcoming microform publications from the point of view of the above standards and publish findings.

3. Keep the international guide of microform bibliographies up to date.

4. Keep the international directory of microform publishers up to date.

5. Keep in contact with national libraries and national union catalogs with respect to bibliographic control of microforms.

6. Emphasize by means of published articles and papers read at state, national and international meetings the need for having microform publications processed and serviced as adequately as other library materials.

The specific objectives of this investigation were three-fold: to determine the acceptability of the agency to librarians, micropublishers and producers of microform equipment; to determine the priority functions to be performed by an agency (presuming an affirmative response to the initial subject); and to specify administrative elements such as organization, start-up costs, staff, sponorship, and membership.

While the literature of microreproduction is quite extensive, much is of little value to librarians. Most works of current importance to bibliographic control, technical quality and management are cited in two bibliographies compiled by Allen Veaner (4, 14). Possibly the best account of library microform progress is contained in a 1960 issue of Library Trends edited by James E. Skipper (10). The collection of articles covers a variety of topics of historical and managerial interest. With relatively minor updating, it could be re-issued as a current library microform state-of-the-art report.

STUDY METHODS AND PROCEDURES

In January 1971, Edward A. Miller, formerly deputy chief, Reference Services Division, National Library of Medicine, assumed the position of principal investigator of Task II of the ARL Microform Project, under the guidance of Louis E. Martin, project director.

During January, Mr. Miller met on a weekly basis with Mr. Stephen McCarthy, executive director, Association of Research Libraries, and Mr. Martin to plan the schedule of project activities. The membership of the advisory committee was decided upon and letters of invitation were mailed. All six individuals invited agreed to serve. They were Thomas Bagg, physicist, National Bureau of Standards; John Berthel, director, The Johns Hopkins University Library; Forrest Carhart, Jr., director, Library Technology Program, American Library Association; Donald C. Holmes, consultant; Charles LaHood, Jr., chief, Photoduplication Services, Library of Congress, and Carl Nelson, consultant and author.

It was decided during these early meetings that the best method of collecting data would be to interview administrators of academic and research libraries, supervisors of library microform services, and managers of microform producing and publishing concerns.

Prior to beginning the interviews, Mr. Miller searched the relevant literature and developed "interview guides" for use with users and producers of microforms. Statistics (1, 12) on academic library holdings were examined for trends in the growth of microform collections. Copies of the guides and other significant documents were sent to members of the advisory committee prior to the first meeting in February, 1971.

The first meeting of the advisory committee was held on February 3 and 4, 1971, in Washington, D. C. The objectives and scope of the project were thoroughly analyzed and defined. There was agreement that the use of microforms created unusual administrative and technical problems in all types of libraries but that their impact was particularly heavy on academic and research collections. The need for a national microform agency, serving library interests and adequately staffed and funded, was endorsed.

Half of the two-day meeting was spent in examining the agency concept and reviewing a list of proposed functions. The second half was concerned with organizational structure and staffing, membership and funding, relationships

with other organizations, project methodology and survey instruments, project work schedules, institutions to be visited and individuals to be interviewed.

Following this meeting, the interview guides were modified to reflect opinions expressed by the committee members, and interviewing began late in February. (A list of institutions visited and persons interviewed is attached as Appendix B.) Most interviewees received copies of the interview guide in advance of the interview. Interviewees were also informed that the guides were not questionnaires but rather a method of directing the discussion. After initial discussions with management personnel in two community colleges and two university libraries, the results were reviewed with the project director and a decision was reached to continue the interviews with only slight modifications of Interview Guide A (Appendix A.) Interviews were conducted from February through July, 1971.

The second meeting of the advisory committee was held on June 29 and 30, again in Washington. Discussion at this meeting centered around a summary and analysis to date of the principal investigator's findings and proposed alternatives to a library-sponsored, independent microform agency.

The sixty-seven persons interviewed represented thirty-two libraries (seventeen university, eight four-year college, three two-year college and four research institutions), nine microproducer-micropublishers, a British nonprofit reprographic service and a microform consulting firm.

A draft of the findings, conclusions and recommendations was sent to the advisory committee prior to a third and final committee meeting in Washington, November 29 and 30. At this session the committee thoroughly reviewed the draft and also discussed some recent developments which seem to offer needed services in the areas of microform evaluation, standards development and other microform management problems. The committee decided that available information on these enterprises was too scanty to permit a judgment as to their value at this time and that a library oriented microform service should be established as soon as possible. After this meeting a revised draft of the report was sent to the committee for final comment.

FINDINGS

The data in this chapter were obtained by the principal investigator mainly from interviews conducted from February through July 1971. Information gathered from the published literature or other sources is annotated to show the source.

The headings used below were derived principally from those used in Interview Guide A (Appendix A). The first ten relate to activities of the agency proposed in previous reports or suggested by the advisory committee. It was imperative, of course, that the responses of the librarians and representatives of the micrographic industry to these initial priorities be determined immediately to establish the validity of the agency concept. The next group of headings relates to administrative elements of an agency and a summary of the responses of representatives of the micrographic industry to the development of a national agency.

A tabulated list of opinions collected during interviews with librarians is attached as Appendix A.

Bibliographic Control of Microforms

One of the functions proposed for a national microform agency involves the implementation of a method of bibliographic control for microforms now under development by Task I of the ARL Microform Project. Because of the reluctance of interviewees to comment on an unpublished scheme, the functional meaning of bibliographic control was expanded to include anything pertaining to it, such as the use of accepted cataloging codes and practices in describing individual documents, gaining adherence to standardized cataloging practices, such as those listed in Specifications for Library of Congress Microfilming (9) and Microfilm Norms (7), and the support of projects such as the National Register of Microform Masters (11).

It is within this context that this function received overwhelming approval. Representatives of twenty-eight of the thirty-two libraries in the survey indicated that bibliographic control should be an essential function of a national microform agency. In the view of many, bibliographic control must include filming preparation routines.

It should be mentioned that some microproducers feel that the sales volume of many microform publications is too low to justify the expense

of a competent editorial staff to meet the bibliographic criteria established by the Library Technology Program of the American Library Association (13).

Few members of the microform industry were willing to discuss the annual dollar volume of microforms sold to libraries. The two estimates received ranged from twenty to twenty-five million dollars. Carl Nelson, a noted authority in the field, and a member of the advisory committee to this study, believes the figure is closer to forty million dollars.

Development and Improvement of Guidelines, Specifications and Standards for Microforms and Equipment

The response of the representatives of libraries indicated that development and improvement of guidelines, etc., is probably the most essential function of a microform agency. Thirty of the thirty-two institutions represented rated specifications and standards for microforms as an essential activity. Twenty-one thought development of specifications for equipment to be essential.

Specifications for microforms are often determined by production problems rather than the availability of reasonably priced and efficient reading machines. Critical technical information such as reduction ratio and image rotation is not included in publishers' lists, catalogs and indexes. Neither is it on microform labels. Only too often the ability to read a given document is not determined until the microform is loaded into a reading machine, a fact hardly conducive to efficient service or user satisfaction. It is undoubtedly because of this situation that this proposed function received such overwhelming approval.

One individual expressed concern, however, that standardization work might inhibit development of new technology, such as COM (computer-output-microfilm), holography, etc.

Cooperative Program for Preserving Materials in Microform

A large number of the librarians thought any national microform agency should be actively engaged in a program for preserving research materials in microform. Twenty-one librarians rated this function as essential while ten more felt it to be useful. One dissenter thought that the micropreservation program should be one part of a larger cooperative effort by research libraries.

The rationale for including the preservation program within the scope of the activities of the agency is the belief that microfilming is the only feasible method now available for preserving the information contained on a truly enormous quantity of deteriorating pages. Much of this information is not used often and probably is of little interest to the

micropublishing industry.

Furthermore, production of quality microforms requires the use of numerous and often scarce skills as well as fairly complex and expensive equipment. Few libraries can justify the operation of a microrecording laboratory for preservation purpose. Consequently, the use of a shared, nonprofit laboratory offers the promise of an effective preservation program and reasonably priced quality microforms. The laboratory could be administered by the agency.

In addition to microfilming, it would perform allied services, such as storage of master and master preservation films, duplication and distribution of service copies and informational activities. It also would cooperate with the National Register of Microform Masters and other services concerned with bibliographic control.

Development of Standard Testing Methods and Procedures and Testing of Microforms

Seven of every ten respondents from libraries consider testing an essential function of a national microform agency.

There was some reluctance, however, to comment on the testing function without assurance that practical testing methods could be developed. The sheer volume of microimages currently produced and existing methods for production of use copies were sited as factors that could prevent the success of an inspection system. There was considerable and strong feeling, nevertheless, that the agency could not influence the microform industry without solid evidence of product deficiencies. This can only be obtained through a testing program. There was general agreement that effective quality control measures for microforms do not necessarily require the use of exhaustive frame-by-frame inspection techniques.

Spokesmen for the microform industry claim that many microform defects are due to conditions over which they have no control. Copy, particularly that prepared by government research contractors, is often of poor quality. Filming of retrospective materials is likely to be complicated by tight bindings, discolored pages, questionable collating practices, etc. These representatives also assert that assembly of a complete set of a multi-volume work is often very difficult and expensive, while assembly of a "perfect" copy set is virtually impossible.

Several micropublishers questioned the need for inspection of microforms in view of their guarantee to provide free replacement of defective microforms regardless of their age. Annual replacement costs to these companies, according to their spokesmen, was stated to be less than one hundred dollars each per year. Several librarians interviewed consider this industry claim as an indicator of user apathy and library staffing problems rather than as an indicator of product quality.

Seal of Approval

Only one-half of the librarians interviewed believe that conferring a "seal of approval" on microform products should be an essential agency function. An almost equal number feel that this activity would be useful. A number of respondents thought it unrealistic to believe that such a procedure would be effective. They also were concerned about legal complications, particularly with regard to restraint of trade. The extreme positions represented on the opinion spectrum included one librarian who said librarians should buy only microforms that are approved by a responsible agency; on the other hand, another thought his job was to provide research materials regardless of form with hard copy as the preferred medium.

Micropublishers, while not opposing the concept of a seal of approval, wanted to know why the microform is the only type of publication that is singled out for this treatment. One publisher was concerned over possible delay in publication caused by waiting upon the approval of an agency.

Subsequent to the interviews, the seal of approval concept was dropped as a possible agency function on the advice of the advisory committee, who agreed that the threat of restraint of trade action and other potential legal complications would outweigh any conceivable benefit to the microform purchaser.

Management of Microform Collections

About a decade ago H. Gordon Bechtman (2) noted the paucity of library literature concerning the effective administration of microform collections. More recently, Donald C. Holmes (5) documented a variety of management problems which prevent scholars reaping the full benefits promised by miniaturization of research materials. It was the serious nature of so many of these problems that led Holmes to recommend the establishment of a national microform agency as the most important step in facilitating the use of microforms.

It seems reasonable to assume that these management problems will increase in view of recent decisions by libraries, particularly by community college libraries, to purchase microforms in lieu of binding backfiles of periodicals.

Dispite the apparent need for management information, fewer than one-half--fourteen--of the librarian respondents believe that microform management studies should be an essential function of an agency. Seventeen thought they could be useful. Only one person considered it

of slight value.

In spite of this lukewarm response, the principal investigator and the advisory committee think that this matter of effective management of microforms should be pursued, but as part of a larger informational and educational program which would cover a variety of topics in the area of microform usage.

Development of Specifications for Original and Microform Publications, and Studies of Photometric Characteristics of Typefaces, Illustrations, Inks, Papers, etc.

The variety of problems encountered during microrecording of research materials has been documented by William R. Hawken (4). A natural follow-up to the Hawken study would be the development of graphic standards for design and execution of copy for orignial micropublications, such as government research reports, and the development of microform standards and practices for filming of retrospective materials where the graphic design has been established and executed.

The librarians interviewed reacted quite favorably to these suggested functions. Industry spokesmen, on the other hand, were somewhat restrained. Indeed, one micropublisher stated, "Whoever dreamed up such a function has never worked with book designers."

Informational and Educational Activities

Somewhat surprisingly, the principal investigator found that librarians had mixed reactions to the proposed informational and educational activities of the proposed agency. Some of those interviewed think that seminars currently offered by trade and professional associations, while somewhat expensive, are adequate for most needs. For example, a seminar offered by a West Coast microform entrepreneur was described by several as excellent. One librarian indicated that microform education must be an area of concern for the National Commission on Libraries and Information Science. There also are some who believe that the training requirements for microform personnel have never been properly deliniated. This perhaps is an important area to be considered by the personnel of a national microform agency.

One librarian in a state-supported school claimed he could not support services such as a national microform agency without evidence of tangible benefits. In other words, he needed a visible "payoff." An information bulletin, published at regular intervals, would help fill this requirement.

Guidelines for Negotiating Agreements or Contracts Between Libraries and Microform Publishers for the Use of Library Materials

Considerable controversy was generated over the suggestion that a an agency could help libraries negotiate contracts with microform publishers. Several librarians stated that library associations are better qualified to develop effective solutions in this area. Several micropublishers questioned whether such guidelines might include uniform service fees, a practice which would be challenged on the basis of restraint of trade.

The principal investigator subsequently recommended and the advisory committee agreed that this proposed activity should not be given further consideration. There was general agreement that library associations are better qualified to perform activities of this nature and that some effective work already has been accomplished.

The Basic Organization of the Proposed Agency

Representatives of twenty-five of the thirty-two libraries in the survey favored organizing the agency as an independent, nonprofit organization. Only five persons of those interviewed opposed this idea, while two expressed no opinion.

Of those in opposition, one librarian is not ready "to set up a separate agency for every problem facing research libraries"; another thinks that the functions proposed for the microform agency should be part of a master preservation plan, supported by the federal government; a third wants a single, coordinated approach to library problems under the aegis of the National Commission on Libraries and Information Science; still another feels that the agency should be operated by an existing service, such as the Center for Research Libraries.

Representatives of six commercial firms favored the concept of an independent, nonprofit organization. Only one representative of industry expressed outright opposition to the development of the agency.

Sponsorship of the Agency

Respondents were heavily in favor of official sponsorship of the agency by reputable professional and or scholarly associations. Organizations suggested as sponsors included the following: the American Council of Learned Societies, the American Library Association, the Association of American Publishers, the Association of College and Research Libraries, the Association of Research Libraries, the Council

on Library Resources, the Educational Media Council, the Information Industry of America, the Microfiche Foundation, the Music Library Association, the National Microfilm Association, the National Science Foundation and the Special Libraries Association.

In view of the number and diversity of the organizations suggested as sponsors, the responsibility for a national microform agency might be a shared responsibility with a number of professional and scholarly organizations involved.

Membership

Among the librarians interviewed there was complete agreement that membership in the Association should be on an institutional basis and open to all libraries regardless of size or type. Two-thirds of the librarians interviewed also favored industry membership of one type or another. Some librarians did express concern over the possibility of industry domination. Six, however, favored full membership privileges for industry including representation on any council or board having responsibility for policy formulation.

Funding

Again, two-thirds of the spokesmen for the libraries think that membership fees should be graduated on criteria such as the total library expenditures, acquisition expenditures, size of microform collections, etc.

While there was general agreement on a graduated fee structure, there was no clear consensus on the specific nature of that structure. It is clear that this matter of funding will have to be worked out very carefully and that the highest degree of equitableness possible be achieved. A poor funding structure clearly would insure the demise of any national microform agency shortly after it was formed. This matter is of special importance today and will continue to be in the future, because of the severe budgetary constraints under which all types of libraries are now operating.

Commitment to Support the Agency

Twenty-six of the libraries in the survery indicated a willingness to join a national microform agency and to support it with a portion of their operating budgets. The principal investigator and the advisory committee consider this a very strong vote of confidence in the viability of the agency concept.

Two of the library representatives indicated they would not favor membership, while four others expressed uncertainty. The two opposed to membership gave different reasons: 1) the effective utilization of microforms is a national problem and, therefore, the agency should be organized and funded by the federal government; and 2) there should be no membership and the agency should operate entirely on service fees.

Three of those who were uncertain leaned toward membership providing there are demonstrated benefits for their institutions. These benefits would have to be forthcoming quickly for these libraries if they are to join and retain membership.

An attempt to determine the amount of financial support the agency might expect from individual members was not particularly successful. Only one person in three cared to volunteer estimates. They ranged from ten dollars to one thousand dollars for college libraries and from one hundred dollars to five thousand dollars for university libraries. All figures of five hundred dollars or more were qualified by a requirement for immediate tangible benefits. There was, naturally, a note of uncertainty because of the belief that current budget difficulties will continue for an indefinite period.

Location

The location of a national microform agency proved not to be a controversial subject. The locations most often mentioned were Washington, Chicago and New York in that order. Reasons for naming a specific place usually were availability of technical expertise and good transportation.

Cooperation of the Microform Industry

At this time the representatives of the microform industry view the proposed agency with mixed emotions, although there is general support.

On the positive side, the industry representatives think that the agency would offer a more direct communication link between industry and the library profession. The representatives interviewed feel that librarians are too "standoffish" to industry and are prone to adopt an adversary role where librarianship and industry interact. A well staffed agency could overcome these difficulties of communication and could effect a mutually beneficial dialogue.

A majority of the industry representatives interviewed think that some policing of the industry would be of value. They agreed that Alan Veaner (15, p. 195) had aptly described microform technology as "a field riddled with unsystematic, disconnected collections of 'gimmicks' masquerading as systems." In fact, one person interviewed remarked that manufacturing and sale of packaged collections consisted of microrecording with 'left-over' standards, adding an index and promoting a product which requires the use of left-over equipment. There is no doubt, also, that micropublishers would appreciate a more sympathetic hearing with regard to the reasonableness of fee schedules for the use of library materials. Fees now charged by some libraries, they contend, equal or exceed the cost of preparing a camera negative. This is another area in which the agency could be of service to both industry and libraries.

It is interesting to note that seven of the industry representatives indicated they would submit samples of their products to the agency for testing. Further, most of those representing firms that have their own production facilities said they would permit plant inspection by agency personnel, even though there was some concern about revealing technical prodution secrets.

Adverse reaction to the agency focuses on regulatory matters, such as changes in standards that would affect manufacturing processes and evaluation work that might affect publishing schedules. Then there was the one industry spokesman who opposed the agency because he thinks there are enough library organizations on the scene.

In general, the responses indicated that producers of microform equipment and micropublishers are prepared to support and work with a national microform agency. This should not suprise anyone since a large share of their revenues comes from libraries. Microproducers and libraries have many common interests and a closer working relationship would be of mutual benefit.

Master Films Held by Micropublishers

The number of microform masters held in company vaults is not known, but it presumed to exceed a million titles. Regardless of storage conditions and film quality, this collection must be considered a great national treasure. They are, however, private corporate assets which could be sold or even destroyed for a variety of reasons.

Safeguarding this precious heritage should be a matter of importance to anyone concerned with preserving a valuable if incomplete record of civilization. The proposed national microform agency would bring together interested and knowledgable parties to work out a procedure to insure the permanence and utility of this resource.

CONCLUSIONS

1. The importance of microforms in academic libraries is evidenced by the fact that in 1971 seventy-four university library members of the Association of Research Libraries reported holdings of 41,737,487 microform units (roll film, microcard, microprint and microfiche). There is no doubt that microforms are essential to the instructional and research programs of the colleges and universities of this nation.

2. Academic libraries are now spending between $25 million and $40 million per year on microforms. This amount probably will increase as libraries face ever increasing shortages of storage space and continue to experience financial constraints. Quality microforms are a partial solution to both problems.

3. In spite of the importance of microforms to academic libraries and the annual sums spent on them, the effective use of microforms within academic libraries is severely hampered because the information requirements of business, industry and government dominate and will continue to dominate the format of microforms and the design of microform equipment. The result of this dominance is a large number of different types of microforms which require a variety of reading equipment.

   Most micropublications of library interest produced in the United States are packaged in the form of 16mm and 35mm roll films, 16mm cartridges, NMA or COSATI microfiche, medium reduction microfiche (Library Resources, Inc.), ultrafiche (NCR) and opaques. Only the medium reduction microfiche and an opaque form were designed specifically for the library trade, and each requires the use of a specialized reading machine designed presumably with library requirements in mind. With the use of lens kits and special adapters, it is possible to read all of these microform packages with six types of reading machines but few libraries are staffed with technicians capable of changing the special lens kits and adapters with rapidity and efficiency. The average library, owning all these types of microforms, might get by with nine different types of machines, but real efficiency would not be achieved.

   The projected growth of the micrographic industry and the continued domination by nonlibrary interests will make the effective management of microform collections even more difficult in the future. An example

of the seriousness of the situation is the recent decision--subsequently rescinded because of protests--of a large microform producer to issue its extensive list of periodicals on 16mm film rather than on 35mm film, as was customary. This decision was made without any consultation with those libraries subscribing to its periodical series, all of whom had equipment with suitable lenses to handle the 35mm but not the 16mm version. It is imperative that this kind of problem be obviated if microforms are to serve higher education efficiently.

4. Solutions to the problems facing academic libraries with regard to the use of microforms will be solved in large part by the academic librarians, themselves. For example, librarians must take a more active role in the activities of the National Microfilm Association and other organizations concerned with the development of microform technology.

5. The most important step in solving these problems would be the development of a national, library oriented microform organization. This organization, properly financed and staffed, could provide the necessary services to the library community, in conjunction with the National Microfilm Association, the American National Standards Institute, etc., in the areas of microform standards, evaluation, research and education. This organization would be a vehicle for the concerted and cooperative activities by librarians in microform technology. It also could serve as the "library voice" in the market place. At present, this voice is hardly audible.

6. The development of a national, library oriented microform organization would receive sufficient support from the library community to make it a viable undertaking. Such an organization would take several years to develop. Consequently, its initial program of services should be sharply limited and emphasis placed on seeking support from libraries of all kinds for a broader and a more comprehensive program.

   Initial functions should be concerned with the development of standards and "good practice procedures," the selective testing of microforms, reading machines and reader-printers, and informational and educational activities. Depending on the effectiveness and speed of the recruiting effort, some product evaluations might be completed by the end of the first year, providing the "seal of approval" concept is abandoned and there is dependence on the existing manuals (good practice guides) issued by the American Library Association (7, 14) and the Library of Congress (9). The technical activities of the office should be guided by a panel of experts selected from the library community and microform industry.

7. An effective program start can be accomplished with a staff of no more than five people at an annual cost of $100,000 to $125,000. This is a very nominal cost in light of the estimated annual sum of $25 to 40 millions spent on microforms by libraries.

RECOMMENDATIONS

1. Establish the "Office of Micrographic Activities" under the administrative control of a research oriented library association.

The priority functions of the office would be as follows:

a) Support the improvement and development of library microform standards and develop specifications and "manuals of good practice" for use until standards are improved and developed.

b) Develop standards and specifications for reading machines, reader-printers and microform storage equipment.

c) Evaluate microform publications for technical and bibliographic quality.

d) Evaluate reading machines, reader-printers and microform storage equipment.

e) Provide informational and educational services through newsletters, seminars, packaged programs, etc.

f) Serve as the liaison for the library community to the micrographic industry and other organizations concerned with micrographic development, and establish an effective dialogue to insure that all interested parties understand the needs of the other.

g) Serve as the ombudsman for individual libraries with regard to microform products and services.

h) Encourage and support, whenever possible, research and development efforts in all areas of microform production and utilization.

Some of the proposed functions are being done now to a limited extent by both profit and nonprofit concerns. The office should avoid duplication of services that are considered reasonably effective, but some duplication will be required to determine library requirements with certainty.

2. Continue the existence of the present advisory committee to Task II for an additional year, under the aegis of the ARL, to perform necessary development work.

During this period the committee should be augmented to more broadly represent the library community. Thought should be given to the possibility of industry representation on the committee. During the one-year period the committee would attempt to accomplish the following tasks:

a) Raise $185,000 to support the proposed office for an initial period of two years. [See addendum for suggested staff and budget requirements.]

b) Negotiate an agreement or contract with a library association or consortium of such associations for management of the office for at least the initial period of two years.

c) Develop specific job descriptions for each position in the office and develop a list of candidates for the position of director.

d) Develop policy guidelines for the office.

3. The Association of Research Libraries should submit a proposal to a funding agency for support of the present advisory committee to Task II for one year.

The funding proposal should provide for a full-time staff person whose major responsibilities would be the raising of the funds to support the office for two years and the working out of an agreement with one or more library associations to assume administrative responsibility for the office.

ADDENDUM 1

Staff and Budget Requirements for the Proposed Office of Micrographic Activities for a Two-Year Period

First Year

Staff

Director	Photographic Technician
Secretary	Technical Writer

Budget

Salaries (amount based on the assumption that only the director and secretary will be employed for the full year):	$40,000
Space (1,000 square feet of office and laboratory space):	6,000
Equipment and Supplies (see Addendum 2 for itemized costs of laboratory equipment and supplies):	20,000
Utilities:	4,000
Travel (includes funds for advisory groups and panels):	10,000
Miscellaneous:	5,000
Total costs for first year	85,000

Second Year

Staff

Director	Two Photographic Technicians
Secretary	Technical Writer

Budget

Salaries:	$69,000
Space:	6,000
Equipment and Supplies:	5,000
Utilities:	5,000
Travel:	10,000
Miscellaneous:	5,000
Total costs for second year:	$100,000
Total costs for first two years:	$185,000

ADDENDUM 2

Equipment Required for a Modest Microform Testing and Inspection Laboratory

	Estimated Cost
Residual Chemical Testing and Testing for Safety Film	
One set of balances	$ 300.00
Miscellaneous laboratory glassware--flasks, beakers, pipettes, graduates, test tubes, crucibles	300.00
Initial supply of chemicals	1,000.00
Laboratory sink including plumbing	1,500.00
Cabinets for housing chemicals and supplies	500.00
Microform Inspection	
Inspection desk equipped with light box, rewinds and hand magnifiers (loupes)	800.00
Film splicer (butt weld) with both 16mm and 35mm ability	1,000.00
Densitometer	1,500.00
Binocular microscope with elements to provide magnifications of 20, 50, 100, 200	1,000.00
Reading machines--one each--combination 16mm and 35mm roll film, 16mm film cartridge, microfiche NMA standard reduction, microfiche medium high reduction (EB project), microfiche high reduction (NCR), and micro-opaques	5,000.00
Equipment for Testing Microform Reading Machines for Screen Illumination and Heat at the Projection Gate	
Photometer with pivoting device	1,000.00
Meter, related apparatus and supply of thermo-couples	1,000.00
Total Cost:	$14,900.00

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APPENDIX A

Summary of Responses

[The responses indicated below were obtained from the thirty-two libraries visited. The number of replies to each question does not total thirty-two in all instances because occasionally no opinion was expressed.

Responses of representatives of the microform industry are not given here. They are summarized in the body of this report.]

I. Listed below are a number of functions proposed for a national microform agency. The priority assigned to each has been suggested by the advisory committee and the principal investigator. Please give your evaluation of the importance of each function and the priority assigned to it.

A. First Priority

1. Implement a system of bibliographic control of microforms now being developed by Task I of this project.

   Essential - 28 Useful - 4 Slight Value

2. Cooperate in the development and improvement of guidelines, specifications and standards for microforms.

   Essential - 30 Useful - 1 Slight Value

3. Coordinate efforts relating to preservation programs utilizing microforms, and assist in the development of national and/or regional repositories for safe storage and use of master preservation films.

   Essential - 21 Useful - 10 Slight Value

4. Develop standard methods and procedures for testing microforms.

   Essential - 25 Useful - 6 Slight Value

5. Test microforms.

   Essential - 23 Useful - 7 Slight Value - 1

6. Issue a "seal of approval" for microforms meeting specified quality standards.

   Essential - 15 Useful - 13 Slight Value - 2

7. Perform in-depth studies of the costs of acquiring, organizing, and storing microform collections and of providing user services.

   Essential - 14 Useful - 17 Slight Value - 1

8. Develop specifications for the preparation of documents to be used in original microform publication projects and develop guidelines for determining the best type of microform to be used for specific microform publication projects.

   Essential - 20 Useful - 12 Slight Value

B. Second Priority

1. Perform a number of educational activities; for example, sponsor seminars on specific problems related to microform technology, management and use.

   Essential - 11 Useful - 18 Slight Value - 3

2. Provide a broad range of information and consulting services for microform publishers and users, including publishing reports, responding to individual requests for specific information, and developing a list of qualified consultants to whom interested parties may be referred.

   Essential - 11 Useful - 17 Slight Value - 4

3. Develop a code for the borrowing and lending of microforms, similar to the interlibrary lending code of the American Library Association.

   Essential - 14 Useful - 15 Slight Value - 3

4. Develop guidelines for negotiating agreements or contracts between libraries and microform publishers.

   Essential - 13 Useful - 14 Slight Value - 5

C. Third Priority

1. Stimulate research in the chemistry of microforms.

Essential - 12 Useful - 18 Slight Value - 2

2. Develop specifications for microform readers, reader-printers, and storage facilities, as funds are available.

Essential - 21 Useful - 10 Slight Value - 1

3. Encourage the study of photometric characteristics of type faces, illustrations, inks, papers, etc., and assist in the development of legibility standards for use in microrecording.

Essential - 16 Useful - 14 Slight Value - 1

II. Do you agree with the advisory committee that a national microform agency should be organized as an independent, nonprofit organization?

Yes - 25 No - 5

III. Do you agree with the advisory committee that a national microform agency should be sponsored by one or more reputable organizations, such as a library association or a learned society?

Yes - 27 No - 5

IV. Membership and funding.

A. Membership.

1. Should membership in a national microform agency be restricted to libraries and archives?

Yes - 7 No - 21
(Three not in favor of a membership organization.)

2. If membership is not to be so restricted, would you admit to membership microform publishers and microform manufacturers?

Yes - 21 No - 9

3. Should members other than libraries and archives be limited to nonvoting membership?

Yes - 20 No - 6

B. Funding.

1. Possible sources of funds include grants from federal agencies and foundations for both seed money and special projects, membership fees, service fees and endowments. Can you suggest other sources of funds?

None Suggested.

2. Should the membership fee be a flat rate or should it be graduated according to one or more criteria?

Flat rate	- 6
Graduated rate	- 21
Service fees only	- 1

3. Would your institution be willing to be a member of a national microform agency and to support it with funds from your operating budget?

Yes - 29 No - 3

V. Do you have any suggestions regarding the best geographical location for a national microform agency?

APPENDIX B

Institutions Visited and Persons Interviewed

January - July, 1971

February 23: Prince Georges Community College, Maryland

Mrs. Leah Nekritz, Director of Library Services
Mr. John Oliva, Periodicals Librarian

February 25: Montgomery College, Rockville, Maryland

Mr. Edward Owens, Director of Libraries

University of Maryland, College Park

Mr. Howard Rovelstad, Director
Miss Virginia Phillips, Coordinator of Reference Services

March 1: Howard University, Washington, D. C.

Mr. Joseph Reason, Director

March 2: Georgetown University, Washington, D. C.

Mr. Joseph Jeffs, Director

March 22: New York Public Library

Mr. James Henderson, Director of Research Libraries

City College of the City University of New York

Mr. Bernard Kreissman, Librarian
Miss Virginia Cesario, Reference Service

March 23: Columbia University Libraries, New York

Mr. Warren J. Haas, Director
Miss Mary Lucy, Librarian, Butler Library
Mr. Donald Anthony, Associate Director

March 23: Hunter College Library, City University of New York

Mr. David O. Lane, Librarian
Mr. James Bardin, Assistant Librarian
Mr. John Warner, Reference Librarian

March 24: Fairleigh Dickinson University, Teaneck, N. J.

Dr. Theodore S. Huang, Director of Libraries

March 25: Hofstra University Library, Hempstead, N. Y.

Dr. Ellsworth Mason, Director

April 6: Pius XII Memorial Library, St. Louis University

M Eugene P. Kennedy, Director
Mr. William Cole, Associate Director
Mrs. Dana Tisthammer, Assistant Director for Technical Services
Mrs. Svetlana Netchvolodoff, Head of Serials
Rev. Daly, Director, Vatican Film Library
Dr. Charles Ermatinger, Vatican Film Library

April 7: Campus Library, Chicago State College

Dr. Fritz Veit, Director
Mr. George Cotton, Periodicals Librarian

The John Crerar Library, Chicago

Mr. William Budington, Director
Mr. Walter Shelton, Assistant Librarian for Technical Services

April 8: Wilbur Wright College Library, Chicago City College

Mr. Richard L. Taylor, Librarian
Mr. Fredric D. Donnelly, Jr., Reference Librarian

Center for Research Libraries, Chicago

Mr. Gordon R. Williams, Director

April 9: University of Wisconsin Libraries, Madison

Mr. Louis Kaplan, Director
Mr. Lloyd W. Griffin, Chief, Reference Division

May 4: Learning Resources Center, Shaw University, Raleigh, N. C.

Mr. Eddie LeFrancois, Librarian
Mrs. Bernice R. Rainbow, Reference Librarian
(Note: Mr. LeFrancois was not present during the interview on May 4 because of illness. His views were received by mail at a later date.)

D. H. Hill Library, North Carolina State University, Raleigh, N. C.

Mr. I. T. Littleton, Director
Mr. William Horner, Systems Librarian
Miss Mary E. Poole, Documents Librarian

May 5: James E. Shepard Memorial Library, North Carolina Central University, Durham, N. C.

Miss Pennie Perry, Chief Librarian
Mrs. Jocelyn Stevens, Reference Librarian

May 6: William R. Perkins Library, Duke University, Durham, N. C.

Mr. Benjamin E. Powell, University Librarian

May 19: University of North Carolina Libraries, Chapel Hill, N. C.

Mr. Jerrold Orne, University Librarian
(Interviewed in Washington, D. C.)

May 21: Microcard Editions, Washington, D. C.

Mr. Albert Diaz, Executive Director

National Reprographic Center for Documentation, Hatfield, England

Mr. B. J. S. Williams, Assistant Director
(Interviewed in Washington, D. C.)

May 25: University of California Library, Berkeley

Mr. James E. Skipper, University Librarian
(Interviewed in Washington, D. C.)

May 26-27: Readex Microprint Corporation, New York City

Mr. Albert Boni, President
(Interviewed in Washington, D. C.)

June 1: San Francisco State College Library

Mr. Thomas R. Roddy, Humanities Librarian

Mr. William Hawken, Consultant, Mill Valley, California

June 2: Stanford University Libraries

Mr. Allen B. Veaner, Assistant Director for Bibliographic Operations
Mrs. Judy Fair, Documents Librarian

Hoover Institution Library, Stanford

Mr. Karol Maichel, East European Curator

June 3: San Jose State College Library

Mr. Stuart Baillie, Librarian

June 8: University of California Library, Los Angeles

Mr. Robert Vosper, University Librarian

Images Interprises, Los Angeles

Mr. Donald A. Johnson, Vice President

June 9: University of Southern California Library, Los Angeles

Mr. Roy L. Kidman, University Librarian

California State College Library, Fullerton

Mr. Ernest Toy, Librarian

June 10: John F. Kennedy Memorial Library, California State College, Los Angeles

Mr. Morris Polan, Librarian

June 18: Microfilming Corporation of America, Glen Rock, N. J.

Mr. Milton Mandell, President

July 7: National Cash Register Company, Special Products Division, New York

Dr. Charles C. Goldman, Manager, Educational Products

July 20: 3M-IM Press, Washington, D. C.

Mr. Donald Furlong, Editorial Manager

July 21: Library Resources, Incorporated, Chicago
(Encyclopaedia Britannica)

Mr. Treadwell Ruml, President
Mr. Herman C. Bernick, Vice President

July 22: Bell & Howell, Micro Photo Division, Wooster, Ohio

Mr. Larry Block, Manager of Micropublishing

July 23: University Microfilms, Incorporated, Ann Arbor, Michigan

Mr. Robert Asleson, President
Mr. Stevens Rice, Vice President

State Historical Society of Wisconsin Library, Madison, Wisconsin

Mr. Ballard Campbell, Graduate Student-American Political History
Mr. Michael Holmes, Graduate Student-History
Mr. Charles Shetler, Librarian
Mr. Richard Zeitlin, Graduate Student-American History

Mr. William Hawken, Consultant to AIA Library Technology Project, Berkeley, California